```
<schema targetNamespace="http://www.foo.com/yellowpage"
    xmlns="http://www.w3.org/2001/XMLSchema"
    xmlns:p="http://www.foo.com/personnel">

 <annotation>
  <documentation xml:lang='en'>
   The Contact Directory Records for foo.com
   Copyright 2003 foo.com. All rights reserved.
  </documentation>
 </annotation>

<complexType name='AddressType' abstract='true'>
  <sequence>
   <element name='street' type='string'/>
   <element name='city'  type='string'/>
  </sequence>
</complexType>



<!-- address type of different country -->
<complextType name='USAddressType'>
  <complexContent>
   <extension base='p:AddressType'>
    <sequence>
     <element name='state' type='p:USState'/>
     <element name='zip'  type='positiveInteger'/>
    </sequence>
   </extension>
  </complexContent>
</complexType>

<!-- etc. ...          -->

<complexType name='employeeType'>
  <sequence>
   <element name='name' maxOccurs='1'/>
    <complexType>
     <sequence>
      <element name='lastname' type='string' maxOccurs='1'/>
      <element name='firstname' type='string' maxOccurs='1'/>
     </sequence>
    </complexType>
   </element>
   <element name='address' type='p:AddressType' maxOccurs='1'/>
   <element ref='notes' minOccurs='0'/>
  </sequence>
  <attribute name='serno'   type='integer'/>
  <attribute name='userid'   type='p:USERID_TYPE'/>
  <attribute name='department' type='string'/>
</complexType>

<complexType name='vendorType'>
  <sequence>
   <element name='name' type='string' maxOccurs='1'/>
```

```
<element name='address' type='p:AddressType'
maxOccurs='1'/>
    <element ref='notes' minOccurs='0'/>
   </sequence>
   <attribute name='serno'    type='integer'/>
   <attribute name='userid'
type='p:VENDOR_USERID_TYPE'/>
  </complexType>

  <element name='yellowpages'>
   <complexType>
    <choice minOccurs='1' maxOccurs='unbounded'>
     <element name='employee' type='p:employeeType'/>
     <element name='vendor' type='p:vendorType'/>
    </choice>
   </complexType>
  </element>

  <element name='notes' type='string'/>

  <element name='employee_notes' type='string'
substitutionGroup='p.notes'/>
   <element name='employer_notes' type='string'
substitutionGroup='p.notes'/>

  <!-- Customized Simple data type declaration -->
  <simpleType name='USERID_TYPE'>
   <restriction base='string'>
    <pattern value='[a-zA-Z]{1}[1-9a-zA-Z]*'/>
   </restriction>
  </simpleType>

  <simpleType name='VENDOR_USERID_TYPE'>
   <restriction base='string'>
    <pattern value='[0-9]{1}[1-9a-zA-Z]*'/>
   </restriction>
  </simpleType>
</schema>
```

FIGURE 3